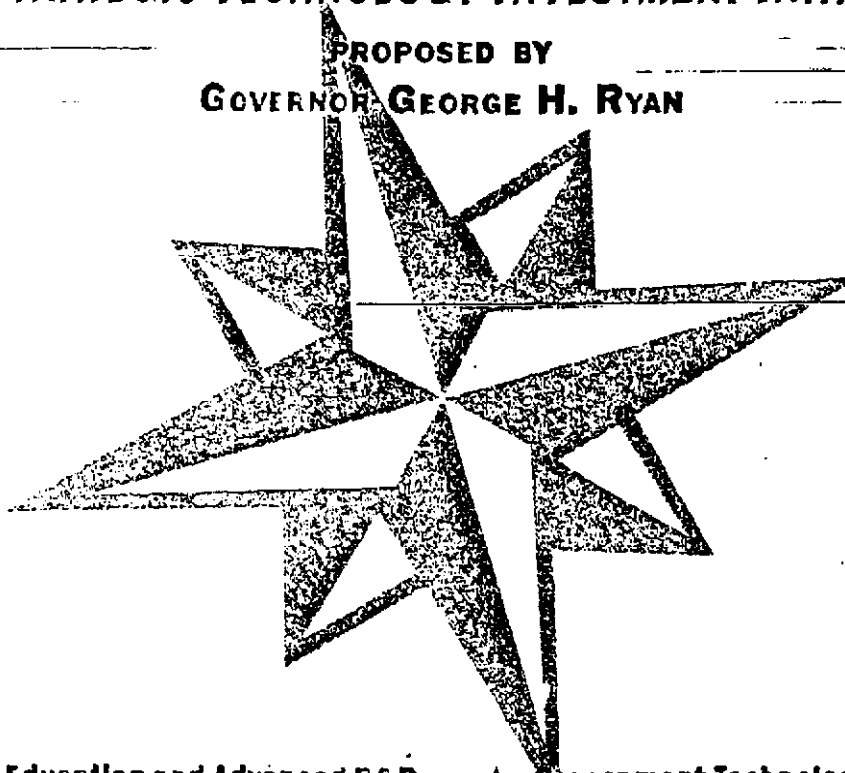




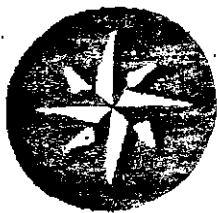
Illinois **VentureTECH**

A STRATEGIC TECHNOLOGY INVESTMENT INITIATIVE

PROPOSED BY
GOVERNOR **GEORGE H. RYAN**



- + Education and Advanced R&D
- + Information Technology
- + Government Technology
- + Venture Capital
- + Health Sciences and Biotechnology



Illinois VentureTECH

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In the fast-paced New Economy developing at the dawn of the 21st Century, technology is the driving force for change, for advancement, for success. New and revamped technology-based businesses are revolutionizing the economy, and will continue to lead the nation and the world for years to come. States that can nurture and grow these tech-based firms will earn a growing pool of well-paying jobs for their workforce, but also reap exceptional spin-off benefits – world-class university talent, federal and private research dollars, and an invigorated entrepreneurial community capable of creating exponential economic growth. *States which fail to attract technology industries will soon find themselves left behind, and their citizens left out.*

Illinois isn't just competing against neighboring states, or California, Texas, or Massachusetts for these jobs – with today's global economy, we are up against countries in every corner of the globe. In order to compete, to grow, to attract entrepreneurs, to garner new investment and new industries, as well as to help its citizens succeed in the New Economy, the State of Illinois must make a serious, coordinated investment of financial and human capital in technology that will improve education, training, economic development, and boost the quality of life of all Illinoisans.

To meet this challenge, Governor George Ryan has developed **VentureTECH**, a five-year, \$1.9 billion comprehensive strategy for investing state resources in education and advanced research and development, health sciences and biotechnology, and cutting-edge information technology programs.

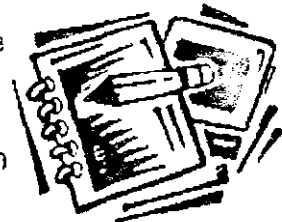
This initiative is the keystone of the Governor's commitment to a comprehensive, long-term strategic plan for technology growth in Illinois. Recent history has shown that a piecemeal approach to addressing technology simply will not work. Nothing short of a rational, well designed, and strategic statewide approach, which builds on our existing strengths, will allow Illinois to remain an economic leader in the future.

VentureTECH includes extensive new investments in people and programs, and also addresses the need for capital investment in technology infrastructure – the wires, the chips, the machines that harness incredible computing power, as well as the buildings, laboratories, and classrooms which house them. Building on a strong foundation, **VentureTECH** will strengthen partnerships with private industry and the federal government and will directly result in nearly \$3.9 billion in technology-related infrastructure improvements in Illinois.

As its name suggests, in addition to these capital investments, **VentureTECH** addresses the need for another kind of capital – venture capital – which is critical for the continued development and expansion of technology startup companies, and their critical importance in the new economy. Illinois' investments in entrepreneurs and researchers will ensure that future generations will benefit from our world-class research institutions and cutting-edge industries.

EDUCATION AND ADVANCED RESEARCH & DEVELOPMENT

Illinois has undertaken significant steps to reform and improve our basic education system, and those efforts must and will continue. At the same time, we must move aggressively beyond those reforms, to assure that our children will be able to compete in the new economy. We must provide them with the modern tools to learn.



Technology is changing the face of business at a revolutionary pace. The successful companies of tomorrow need educated, adaptive, skilled employees. To assure that our workforce can meet the demands of tomorrow's workplace, we must offer them the education and training to acquire new skills. Providing a pool of highly qualified employees will also serve as a tremendous incentive for high-tech business to relocate and grow in Illinois.

According to the most recent data, Illinois' technology workers earn nearly two-thirds more than the average private sector worker, and the demand continues to grow. The US Department of Commerce has projected that over 1.3 million new technology workers will be needed by the Year 2006. Make no mistake: Illinois wants the high-paying, high-quality jobs that the new economy has to offer. VentureTECH invests in the educational infrastructure, applications and training necessary for preparing our youth and our workforce for the 21st Century.

Information Technology, Communications, and Intellectual Capital, rather than energy and raw materials, power today's businesses. The driving force of the old economy was heavy manufacturing. The driving forces of the new economy are ideas, knowledge, services, and higher-order skills."
 — National Governors' Association, "State Strategies for the New Economy," February 2000

Illinois Century Network – The creation of a virtual gathering place for universities, colleges, schools, libraries, museums, government agencies, and businesses to all communicate interactively and collaboratively regardless of geographic location. Establishing this digital network will make sharing ideas, educating our children and delivering services easier than it has ever been before.

I-WIRE – The creation of this advanced optical network will allow our state's flagship universities and federal laboratories to work with industry to design the next generation Internet and the applications that will drive it.

Illinois Virtual Campus – Providing access for all Illinois citizens to diverse higher education resources, including baccalaureate programs, graduate study, and professional development, via distance learning and the Internet. The IVC includes the instructional resources of public and private colleges and universities, delivered in large part by Internet-based distance learning technologies, and combines these resources with outreach, individual advising, network access, and technical support at community colleges statewide.

Digital Library – This multi-year program will eventually eliminate the barriers of time and place – not to mention resources – by providing a digital library of full text and images, and digitized resources for college and university students and faculty.

Higher Education Engineering Equipment Grants – These funds are provided to acquire state-of-the-art equipment for Illinois college and university engineering programs. Awarding of these grants is designed to increase the number of engineering degrees awarded by Illinois public and private institutions.

Higher Education Information Technology Grants - This new grant program will increase the supply of information to technology workers in Illinois by providing over 1,000 need-based scholarships to Illinois graduate students that seek to pursue advanced educational study in the field of information technology.

Higher Education Matching Grants - This program provides incentives to Illinois colleges and universities to improve their technology research capabilities. Especially important will be the attraction of federal funds to further the state's leadership in information technology.

Advanced Tech Worker Training - This initiative will allow Southern Illinois University at Edwardsville to operate a new Advanced Technology Worker Training Center which will provide market-driven, business-oriented, state-of-the-art job training for individuals whose primary background is in the liberal arts.

Illinois Virtual High School - Utilizing various technologies, this project will explore new ways to deliver high school and college-level opportunities to students throughout Illinois.

Eliminating K-12 Education Barriers - The state will continue to provide funding to local school districts to wire classrooms, libraries and laboratories to the Internet. In addition, through **VentureTECH**, the state will provide museum grants to bring exhibits to schools through the use of technology.

Bricks and Mortar

Even in the virtual world of e-everything, we still need physical structures - buildings and laboratories - to house the equipment and researchers that drive the success of our efforts. In addition to important investments in people and programs, **VentureTECH** includes funding for construction of critical pieces of infrastructure.

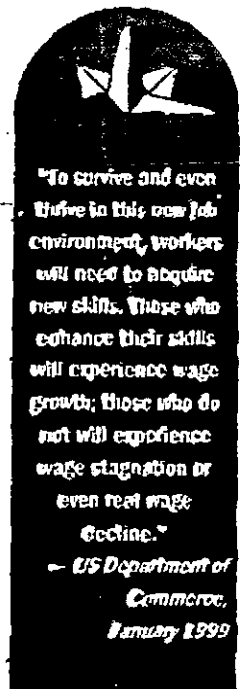
UI Computer & Engineering Building - This new building will facilitate advances in high-performance networking, distributed computing, data mining and mobile computing - the vision of anywhere, anytime access to information.

National Center for Supercomputing Applications Building - This new home for the next generation of Internet applications is designed to attract federally-funded research including the terascale supercomputing competition.

Argonne Rare Isotope Accelerator - State investment at Argonne is designed to attract the \$500 million next-generation accelerator, which will provide unparalleled research capabilities to explore the fundamental role of atomic nuclei in the processes of the universe.

Fermi Accelerator Research - Led by IIT, this is a partnership with Fermi lab and a consortium of Illinois universities to examine the next generation of accelerator technology.

Advanced Photon Source - This is a national synchrotron radiation research facility in which six Illinois universities participate collaboratively with scientists from private industry and the federal government.



INFORMATION TECHNOLOGY

The New Economy is driven by entrepreneurs, small businesses, and technology-based start-ups. The jobs these firms create are much better paying on average than those in most other industries. We want these jobs for Illinoisans.



In the increasingly global New Economy, Illinois is no longer competing against other states to attract new high tech businesses and the good jobs they bring. Rather, we are competing against dozens of other countries, located in every corner of the world.

Through the Department of Commerce and Community Affairs and other state, local, and university programs, Illinois is working hard to attract and retain businesses and jobs here in the Land of Lincoln. Lucent and Motorola. In part because of these efforts, and because of our great strengths – a skilled workforce, creative entrepreneurs, world-class universities and research labs, and high quality of life – Illinois is currently among the top five states in the number and growth of technology firms.

But to retain this advantage, and in order to compete in the 21st Century, Illinois must expand its current efforts to provide an environment that encourages the location of new high tech firms, and the expansion of existing businesses which are aggressively utilizing technology to grow and prosper. We also need to undertake a coordinated effort to market Illinois' technology strengths to the worldwide technology community – everyone from entrepreneurs to venture capitalists, from skilled technology workers to world-class university researchers.

VentureTECH builds on our existing efforts and strengths by providing investments to increase technology spin-offs, encourage new technology ventures, market our success, and maintain our leadership position in driving economic development in the high-tech New Economy.

Whether work occurs
in an office, at home,
or on a factory floor,
information
technology is integral
to any successful
business. Today, 50
percent of all business
capital spending goes
to information
technology, compared
with just 7 percent in
1970."

— "America's High-
Tech Economy," *Wall Street
Journal*, July 18, 1999

DCCA Technology Advancements – Increased funding to assist businesses and research institutions in the development and utilization of modern technologies to strengthen Illinois' economic competitiveness. Illinois funding will assist commercialization of new technologies, secure research and development funding, and leverage private and federal investments.

Illinois Technology Enterprise Corporation – The State will establish a regional network of ITEC centers designed to stimulate the formation, growth and retention of technology-based businesses in Illinois. By leveraging and organizing the growing technology

leadership in many communities, ITEC will promote technology growth through the improvement of delivery of existing economic development programs and the promotion of other State resources.

University of Illinois Tech Incubator – An integral part of the Champaign-Urbana research park is the essential availability of office and laboratory space for researchers and entrepreneurs. The State's investment will be matched by university and private resources. New spin-off companies are expected to result from improved commercialization of university research, creating new jobs and industries in Illinois.

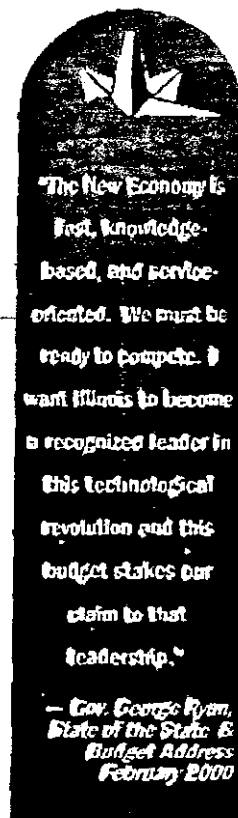
Technology Marketing – It is critical to promote Illinois' growing prominence in the new economy. For the first time, Illinois will advertise its technology strengths and opportunities. This \$20 million technology marketing program will promote the role of Illinois in the New Economy and attract businesses and investors to the 4th largest technology economy in the US. Private industry groups have applauded this program and expressed a willingness to match the State's financial commitment.

Office of Technology Transfer – In order to ensure that Illinois students and researchers have every opportunity to bring their ideas and innovations to market, a new office will be created at the University of Illinois to provide essential business services to researchers and start-up companies that spawn from University research.



Microelectronics – Major expansion of the Microelectronics Laboratory at Urbana will spearhead research and industrial collaboration in nanotechnology. This outgrowth of supercomputing will dramatically benefit biotechnology and infotechnology efforts.

IIT Center for Safe Food for Small Businesses – Direct technical assistance to small and medium sized food manufacturers to assure both safe products for public consumption and improve companies' competitiveness.



HEALTH SCIENCES AND BIOTECHNOLOGY

The VentureTECH Initiative also provides significant investments in the next generation of tools that will grow our food better, prevent and cure disease, and deliver up-to-date health information to patients and health professionals.



Centers for Academic Excellence – Provides funding to teaching hospitals to conduct additional clinical care research and develop new treatments and therapies. The hospitals use these grants to leverage additional federal and private research funding.

Rural Health Initiative – This initiative through the SIU School of Medicine will expand health care services in central and southern Illinois, including distance technologies and telemedicine that will improve access to specialized medical care. Funds will be used to provide needed technology to bring clinical services to place-bound populations in need.

Higher Education Health Services Grants – These grants assist institutions offering programs that educate and train health professionals, allowing these colleges and universities to improve their training programs to include ever-changing technological advances in health care. This funding is for medical, dental, optometric, podiatric, pharmacy, allied health, nursing, and medical residency programs.

Alzheimer's Disease – Funding for Alzheimer's Disease Assistance Centers which provide diagnostic, treatment, and support services to Alzheimer's patients and their families, education to the public and to professionals, and grant money for cutting-edge research into this devastating disease.

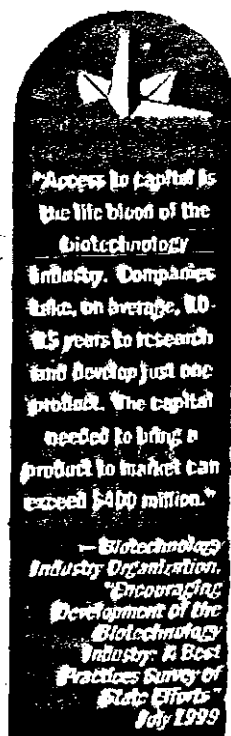
Agriculture Value-Added Initiative – This program provides support to new and expanding agri-businesses and offers matching grants to farmers to help them earn a profit from processing their raw commodities. This initiative encourages research and development of value-added agricultural products.

UI Veterinary Research – Funds will be directed to research projects that focus on pre-harvest food safety, particularly on identifying and controlling infectious diseases in animals that constitute a hazard to human health.

Bricks and Mortar

In addition to investments in people and programs, VentureTECH includes funding for construction of several critical pieces of infrastructure – buildings and laboratories – to house the tremendous medical advances that will come from these areas of investment.

Medical School – This state-of-the-art new research facility on the University of Illinois' Chicago campus will add biomedical research capabilities and increase the capacity to find cures for diseases and treatments. This investment in research, which will leverage federal National Institute of Health funds, will help cut down on the healthcare costs downstream.



Post-Genomics Institute – Genomics is the centerpiece of biotechnology, and this project will help Illinois take advantage of this burgeoning industry. A new institute at the UI Urbana campus, this facility will help bridge cross-discipline, cutting edge research in the biological sciences as well as agriculture that will help improve the quality of life in Illinois. The institute will focus on the development of new technologies and capitalize on the biology/engineering interface, growth in the field of biotechnology and expansion into commercialization. Just a few of the research examples include: new varieties of corn and pest-resistant soybeans, improvements in animal sciences, biofarming, and pharmaceuticals – the production of pharmaceuticals through the modification of an animals' genetic material.

Chicago Tech Park Expansion – The state will continue its investment in the planned expansion of the Chicago Tech Park. The state's investment will leverage a tenfold return of private sector financing for the construction of a \$10 million technology incubator on the West Side of Chicago's and Illinois medical district. In addition, a \$50 million medical research facility is being privately-financed by Rush Medical Center in the same area.

Medical Resonance Imaging – This new facility in Chicago will serve as the premier medical imaging research/clinical facility in the nation. Research conducted utilizing this new imaging technology will lead to improved healthcare and commercially viable software and hardware, while training students moving into electronic healthcare industries.

Chemical Sciences Building – This new research facility in Chicago will allow connections between the basic structural biology and science to biotechnology. Research areas include tumor growth, HIV, immunology, dental, orthopedics and environmental impacts.

Pharmacy Building – The majority of this space will be programmed as wet laboratory research space needed to expand on-going research programs and recruit new faculty. This UIc facility will allow for development of cost-effective pharmaceuticals for treatment and cures. Research at this facility will foster new discoveries and commercialization with the private pharmaceutical industry.

Biomedical Research Building – This new biomedical research building will become part of an entire complex at Northwestern's Chicago campus that will provide extraordinary research capabilities and federal funding opportunities as well as new interaction with the biotechnology industry. The state's investment will leverage a significant match from the private sector.

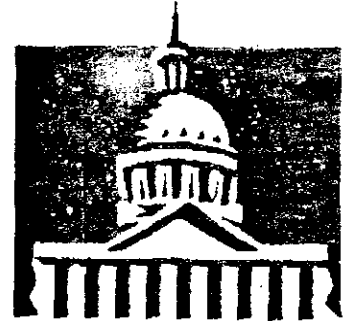


"The race is on to map human, animal and plant genes, and decipher their functions. The goals are to enhance human health, increase food production and quality and improve the environment. States not at the leading edge of this remarkable technology will lose outstanding scientists, visionary entrepreneurs, business opportunities and economic advantage."

— "At the Crossroads: The State, the University and Tomorrow's Technology"
U of I, February 2000

STATE GOVERNMENT INFORMATION TECHNOLOGY


Just as technology is revolutionizing the marketplace, technology is the key to improving the way government serves its people. For example, as more and more industries abandon the outmoded model of 9-to-5 customer service, government must also move toward providing its services 24 hours a day, seven days a week, or risk losing the confidence of its citizens. Technology holds the key for better management of government data and dollars, which translates directly to better service for people who depend on government assistance, for "customers" who wish to use a state service, and for businesses who must meet government requirements to operate.



To compete in the emerging new economy, government at all levels must become more flexible, adaptable, and innovative, as well as more consumer friendly, performance-driven, and accountable.

If Illinois fails to make these changes, we risk losing our highest skilled and educated workers, our entrepreneurs, and the private capital that sparks innovation and business expansion, the loss of which would dramatically reduce the quality of life of our great state.

To meet this challenge, *VentureTECH* includes funding for new and ongoing technology initiatives throughout state government, designed to improve customer service, maximize taxpayer resources, and make the state more performance-driven, efficient, and accountable.


"E-Government must extend beyond the realms of technological innovation. The important question is not just how we can harness technology to deliver government services better, but also how we use it to deliver better government. What will good government actually consist of in a Global Information Age society?"
— *Government Technology's e-Gov magazine, Spring 2000*

More Efficient Delivery of Human and Social Services – Development is underway for a virtual case management system at the Department of Human Services, a LINK card system for providing electronic benefits, and a new fingerprint imaging system to help provide identification as well as fraud prevention. Also included are a Medical data warehouse at Public Aid, and a system to continuously measure performance of the Medicaid Program, and detect fraud and abuse.

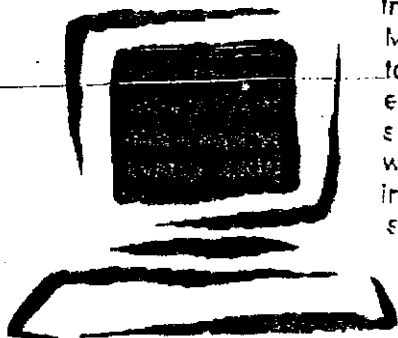
Improved Health Care – The state will expand its telemedicine initiative through the Department of Public Health, to improve health access to underserved areas, allowing small hospitals to link to larger facilities and better emergency services.

Better Workforce Assistance – The Department of Employment Services will unveil a Skills Match system to provide intelligent matching of job requirements posted by employers with job skills of applicants, and a new analysis tool that will enable the state to customize training opportunities to meet current needs of employers and prospective employees.

Geographic Information Systems – Investments will be made to develop a statewide

spatial data infrastructure, integrating multi-agency resources and allowing access to a broader range of layered data and information. Integrating GIS into the critical and routine development activities of state agencies will foster better decision-making and overall planning to meet the needs of citizens.

Tools for Law Enforcement – The Illinois State Police will continue to develop and expand its Wireless Information Network, allowing any law enforcement agency in the state mobile access to the Law Enforcement Agency Data Systems, for the transmission of photo images and fingerprints from the field, direct access to warrant information databases and automated voice dispatch of officers in the immediate area. Also funding for STARCOM21, the new ISP voice radio communications system.



Improved Technology Management Tools – Central Management Services will acquire important elements to improve accountability and productivity, including an e-commerce clearinghouse, productivity software standards across agencies, standardized data warehousing, and research into the feasibility of an integrated statewide human resource management system and standardized accounting system for state agencies.

Intelligent Transportation System – Through monitors in the pavement, this system allows real-time information for motorists about weather conditions, congestion and accurate traffic reports. Also included would be funding for Accident System/Traffic Safety Mobile Units, to allow the State Police to enter records on-site and transfer directly to the Illinois Department of Transportation.



"Policies that promote technological innovation and improve education can boost a state's innovative capacity and create a more dynamic and productive workforce. Just as New Economy businesses constantly scramble to embrace new practices and innovations, states must continually improve their policies and governmental operations."

— Progressive Policy Institute, July 1999

VENTURE CAPITAL

Timely access to seed capital is one of the most critical factors for sustaining growth of new technology-based enterprises. Despite recent dramatic increases in venture capital, the revolutionary pace of growth in the technology sector is continuing to create tremendous demand for scarce seed and early-stage capital. With it, many high-tech firms – called gazelles – have grown at a steady clip of greater than 20 percent a year. Without it, these companies can only limp along, and hope that a fully capitalized firm doesn't surpass them, and put them out of business. In the revolutionary technology industry, a market governed not by calendar-years but by 90-day "web-years," slow-growth means no-growth.



While venture capital investments increased more than 150 percent nationwide in 1999, Illinois saw an increase of only 50 percent.

— Pricewaterhouse
Coopers' Money Tree
US Report
March 2000

While the amount of venture capital investment increased dramatically around the country last year, the amount invested in Illinois companies did not keep pace. We cannot allow this trend to continue, or Illinois will risk becoming a bit-player in the New Economy, as fast-growing technology start-ups will quickly choose to locate in the new money centers, taking talent and technology with them.

Most experts agree that in order to fully capitalize on the State's continuing investment in Illinois' science and research institutions, and to assist emerging biotechnology businesses and our growing prominence in the area of information technology, Illinois must increase the availability of venture capital.

In pursuit of this goal, Governor Ryan has secured the leadership and cooperation of the Illinois State Treasurer, the Illinois Board of Investment, the Illinois Development Finance Authority, and each of the major pension boards – the State Teachers' Retirement System, the State University Retirement System, and the Illinois Municipal Retirement Fund – to dramatically increase the availability of venture capital in Illinois.

This new cooperative effort will be spearheaded by the Illinois Technology Venture Council, which will be led by State Treasurer Judy Bazar Topinka and representatives from all of the State's major pension and investment funds. Its purpose will be to dramatically increase the amount of technology based venture capital that is available to Illinois technology start-up firms in Illinois.

The Governor has challenged the Council to surpass a goal of over \$800 million in venture capital funds over the next four years.

State Treasurer – Treasurer Topinka has for many years strategically linked the placement of over \$400 million of state funds in Illinois Financial Institutions that offer a competitive interest rate and also provide special attention to small businesses and farmers. In order to build on the Treasurer's success of the Linked Deposit program, Governor Ryan is actively supporting the Treasurer's creation of the Illinois Technology Venture Investment Program which will allow the Treasurer increased flexibility over a small but

strategic portion of the state's investment portfolio. Increasing Treasurer Topinka's flexibility with up to 1% of the state's current assets under management will enable Illinois to establish a \$50 million program that ensures a profitable return on its investment while at the same time providing a strategic incentive to venture capitalists seeking to invest in Illinois' rich science and technology communities.

Department of Commerce and Community Affairs – The Governor has asked the Technology Venture Council and each of its members to work with DCCA and other state economic development officials to forge a new historic partnership between the state's pension funds, DCCA, and the many venture capital funds that will receive increased funding from these investments. For the first time ever, DCCA staff will be informed of which venture capital firms are receiving state pension funding, and the staffs of these state pension funds have agreed to assist DCCA in the presenting of Illinois technology firms and entrepreneurs directly to the state-funded venture capital funds for investment consideration.

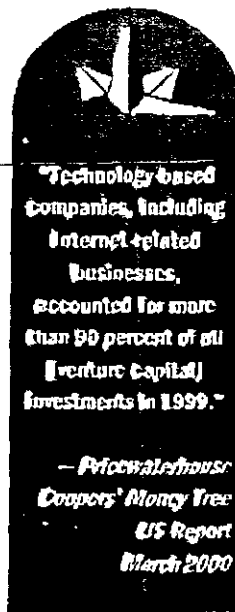
In addition to this new spirit of cooperation, there are immediate financial opportunities that Illinois technology start-up companies and biotech entrepreneurs can expect from the infusion of \$800 million in new and expanded venture capital resources.

Technology Bridge Loans – The unique partnership between DCCA, the Illinois Coalition and the Illinois Development Finance Authority (IDFA), will dramatically increase State funding for early seed-stage capital for Illinois technology entrepreneurs. The increase of \$15 million over the next three years represents a 50 percent increase in IDFA's commitment to this program.

In addition to this new spirit of cooperation, there are immediate financial opportunities that Illinois technology start-up companies and biotech entrepreneurs can expect from the infusion of \$800 million in new and expanded venture capital resources.

The following is a list of the assets of the pension funds that have agreed to participate in the historic Illinois Technology Venture Council:

- ✦ State Board of Investments – \$8 billion in assets
- ✦ Teachers' Retirement System – \$22 billion in assets
- ✦ State University Retirement System of Illinois – \$12 billion in assets
- ✦ Illinois Municipal Retirement Fund – \$15 billion in assets
- ✦ Total, combined assets of the members of the Illinois Technology Venture Council – over \$57 billion



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Or visit our website: <http://www.state.il.us/tech/>

Ex. SLL-3



James J. Stukel, President,
University of Illinois

Why is everyone converging

Richard M. Daley
Mayor, City of Chicago

Frederick A. Krehbiel
Co-Chairman & Co-CEO, Molex



John W. Rowe
President & Co-CEO, Exelon

We've all heard the conventional definition of "convergence," the integration of voice, video and text in wireless communications. But "convergence" is taking on a profoundly new meaning. In Illinois, we see an entire "Convergence Economy." An economy where different technological platforms are coming together, driving the success of business and creating new opportunities for the future.

To thrive in this challenging business dynamic, companies are seeking a state that provides them with a solid foundation that supports industries that make convergence possible.

in Illinois?

Michael J. Birch
Chairman of the Board, Tellabs

George H. Ryan
Governor, State of Illinois

Christopher B. Galvin
Chairman & CEO, Motorola

Ray M. Curran
President & CEO, Smurfit-Stone Container

Illinois is where it all comes together. Under the leadership of Governor George H. Ryan, Illinois boasts a statewide network of resources made up of participants from the government, academia and private sectors, all working collaboratively to deliver integrated solutions for your business.

For more information, e-mail us at converge@commercestate.il.us or call (877) 221-4403, and find out how your business can benefit from an Illinois convergence.

ILLINOIS
RIGHT HERE, RIGHT NOW

www.commercestate.il.us
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